

## **IN THE CLAIMS**

Claims 1-50 (canceled).

51. (currently amended) A storage system ~~internally~~ comprising:

a plurality of disk drives for corresponding to a plurality of fibre channel interface paths;

a controller to be coupled to a network for ~~controlling~~ receiving data transfer from/to an ~~another computer~~ information unit coupled to said network and ~~controlling~~ transferring data transfer ~~for to~~ said plurality of disk drives;

~~an another computer~~ information unit interface, included in said controller, ~~disposed a side of said another computer in said controller~~ for receiving data sent from said ~~another computer~~ information unit via said network;

a disk drive interface, included in said controller, ~~disposed a side of said disk drives in said controller for receiving data sent from said another computer via said another computer interface and for~~ transferring data sent from said ~~another computer~~ information unit ~~for to~~ said plurality of disk drives; and

a plurality of switches, ~~each plurality of switches~~ coupled to said controller ~~via~~ by at least one of first paths;

wherein said switch is further coupled to said ~~plurality of~~ disk drives ~~via~~ by said plurality of fibre channel interface paths;

wherein the number of said at least one of first paths is less than the number of said plurality of fibre channel interface paths;

wherein said ~~plurality of~~ disk drives store data sent from said ~~another computer~~ information unit through said switches, and each of said ~~plurality of~~ disk

drives has an identification (ID) number; and

wherein said switches ~~establish a switch connection between said disk drive interface and said disk drives, and~~ transfers data to a selected disk drive among said plurality of disk drives ~~via~~ by a one of said fibre channel interface paths ~~among said plurality of fibre channel interface paths based on information of said ID number of the selected disk drive to which data is to be written upon~~ based on receiving said data from said disk drive interface.

52. (currently amended) The storage system according to claim 51,  
wherein said switches dynamically switches between said ~~plurality of~~ disk drives.

53. (currently amended) The storage system according to claim 51,  
wherein said controller generates a parity data from data sent from said ~~another~~ computer information unit, and  
wherein at least one of said disk drives ~~of said plurality of disk drives~~ stores said parity data.

54. (currently amended) The storage system according to claim 51,  
wherein said controller generates a parity data from data sent from said ~~another~~ computer information unit, and  
wherein some disk drives of said ~~plurality of~~ disk drives are stored ~~stores~~ data without said parity data.

55. (currently amended) The storage system according to claim 51,  
wherein at least one of said disk drives ~~of said plurality of disk drives~~ are ~~is~~ a  
spare disk drives, said spare disk drives storing data from another disk drive of said  
~~plurality of disk drives~~.

56. (currently amended) The storage system according to claim 51,  
wherein a first one of said disk drives is capable of communicating with said  
switches independently of a fibre channel interface path associated with a second  
one of said disk drives.

57. (currently amended) The storage system according to claim 51,  
wherein said at least one of first paths are ~~is~~ a fibre channel interface paths.

58. (currently amended) A storage system comprising:  
a plurality of disk drives for corresponding to a plurality of fibre channel  
interface paths;  
a controller to be coupled to a network for ~~controlling~~ receiving data transfer  
from ~~to~~ an ~~another computer~~ information unit coupled to said network; and  
a switch coupled to said controller ~~via~~ by at least one of first paths;  
wherein said switch and is further coupled to said ~~plurality of disk drives~~ via  
by said ~~plurality of~~ fibre channel interface paths;  
wherein the number of said at least one of first paths is less than the number  
of said ~~plurality of~~ fibre channel interface paths;

wherein said ~~plurality of~~ disk drives store data sent from said ~~another computer information unit~~ through said switch, and each of said ~~plurality of~~ disk drives has an identification (ID) number; and

wherein said switch ~~establishes a switch connection between said controller and said disk drives, and transfers~~ data to a ~~selected~~ at least one of disk drives among said ~~plurality of~~ disk drives ~~via~~ by at least one of said fibre channel interface paths ~~among said plurality of fibre channel interface paths~~ based on information of said ID number of ~~the selected~~ said at least one of disk drives ~~to which data is to be written upon receiving said data from said controller.~~

59. (currently amended) The storage system according to claim 58,

wherein said storage system has a plurality of said switches, each plurality of switches coupled to said controller ~~via~~ by each of said at least one of first paths.

60. (currently amended) The storage system according to claim 58,

wherein said switch dynamically switches between said ~~plurality of~~ disk drives.

61. (currently amended) The storage system according to claim 58,

wherein said controller generates a parity data from data sent from said ~~another computer information unit~~, and

wherein at least one of said disk drives ~~of said plurality of disk drives~~ stores said parity data.

62. (currently amended) The storage system according to claim 58,  
wherein said controller generates a parity data from data sent from said ~~another~~  
~~computer~~ information unit, and  
wherein some disk drives of said ~~plurality of~~ disk drives stores data without said  
parity data.

63. (currently amended) The storage system according to claim 58,  
wherein at least one of said disk drives ~~of said plurality of disk drives~~ are ~~is a~~  
spare disk drives, said spare disk drives storing data from another disk drive of said  
~~plurality of~~ disk drives.

64. (currently amended) The storage system according to claim 58,  
wherein a first one of said disk drives is capable of communicating with said  
switch independently of a fibre channel interface path associated with a second one  
of said disk drives.

65. (currently amended) The storage system according to claim 58,  
wherein said at least one of first paths are ~~is a~~ fibre channel interface paths.

66. (currently amended) A storage system comprising:  
a plurality of disk drives for corresponding to a plurality of fibre channel  
interface paths;  
a controller to be coupled to a network for ~~controlling~~ receiving data transfer

from ~~to an another computer~~ information unit coupled to said network; and

a switch coupled to said controller ~~via~~ by at least one of first paths;

wherein said switch is further and coupled to said plurality of disk drives via

by said plurality of fibre channel interface paths;

wherein the number of said at least one of first paths is less than the number of said ~~plurality of~~ fibre channel interface paths;

wherein said ~~plurality of~~ disk drives store data sent from said ~~another computer~~ information unit through said switch and each of said disk drives has an identification (ID) number; and

wherein said switch receives data from said controller, and transfers data independently to individual ones of said ~~plurality of~~ disk drives over individual ones of said ~~plurality of~~ fibre channel interface paths.

67. (currently amended) The storage system according to claim 66,

wherein said storage system has a plurality of said switches, each plurality of switches coupled to said controller via by each of said at least one of first paths.

68. (currently amended) The storage system according to claim 66,

wherein said switch dynamically switches between said ~~plurality of~~ disk drives.

69. (currently amended) The storage system according to claim 66,

wherein said controller generates a parity data from data sent from said ~~another computer~~ information unit, and

wherein at least one of said disk drives ~~of said plurality of disk drives~~ stores said parity data.

70. (currently amended) The storage system according to claim 66, wherein said controller generates a parity data from data sent from said ~~another computer~~ information unit, and

wherein some disk drives of said ~~plurality of disk drives~~ stores data without said parity data.

71. (currently amended) The storage system according to claim 66, wherein at least one of said disk drives ~~of said plurality of disk drives~~ are ~~is a~~ spare disk drives, said spare disk drives storing data from another disk drive of said ~~plurality of disk drives~~.

72. (currently amended) The storage system according to claim 66, wherein a first one of said disk drives is capable of communicating with said switch independently of a fibre channel interface path associated with a second one of said disk drives.

73. (currently amended) The storage system according to claim 66, wherein said at least one of first paths are ~~is a~~ fibre channel interface paths.

74. (currently amended) A storage system comprising:

a plurality of disk drives for storing data sent from external of said storage system; and

a switch, coupled to said disk drives and a controller controlling to transfer data and said disk drives, for selecting a disk drive from said disk drives; and causing transferring data sent from external of said storage system to ~~be transferred to~~ said disk drives,

wherein said disk drives coupled to said switch ~~via~~ by a plurality of fibre channel arbitrated loops and said disk drives have identification (ID) number,

wherein the number of one or more paths between said controller and said switch is less than the number of said ~~plurality of~~ fibre channel arbitrated loops, and

wherein said switch ~~determines a transfer destination disk drive to which said data sent from external of said storage system is to be sent and~~ transfers said data sent from external of said storage system to ~~said transfer~~ a destination disk drive ~~via~~ by a corresponding one of said fibre channel arbitrated loops ~~among said plurality of fibre channel arbitrated loops~~.

75. (currently amended) The storage system according to claim 74, wherein said storage system has a plurality of said switches, each plurality of switches coupled to said controller ~~via~~ by each of said one or more paths.

76. (currently amended) The storage system according to claim 74, wherein said switch dynamically switches between said ~~plurality of~~ disk drives.



77. (currently amended) The storage system according to claim 74, wherein said controller generates a parity data from said data sent from external of said storage system ~~another computer~~, and

wherein at least one of said disk drives ~~of said plurality of disk drives~~ stores said parity data.

78. (currently amended) The storage system according to claim 74, wherein said controller generates a parity data from said data sent from external of said storage system ~~another computer~~, and

wherein some disk drives of said plurality of disk drives stores data without said parity data.

79. (currently amended) The storage system according to claim 74, wherein at least one of said disk drives ~~of said plurality of disk drives~~ are is a spare disk drives, said spare disk drives storing data from another disk drive of said ~~plurality of disk drives~~.

80. (currently amended) The storage system according to claim 74, wherein a first one of said disk drives is capable of communicating with said switch independently of a fibre channel arbitrated loop associated with a second one of said disk drive.

81. (currently amended) The storage system according to claim 74,

wherein said one or more paths ~~at least one of path is~~ are a fibre channel arbitrated loops.

82. (currently amended) A storage system comprising:

a plurality of disk drives for storing data sent from external of said storage system; and

a switch, coupled to said disk drives and a controller controlling to transfer data and said disk drives, for transferring ~~determining a disk drive from said disk drives, and causing data sent from external of said storage system to be transferred~~ to said disk drives,

wherein said disk drives coupled to said switch forms a fibre channel ~~arbitrated loop~~ and said disk drives have identification (ID) number,

wherein the number of one or more paths between said controller and said switch is less than the number of paths between said switch and said ~~plurality of disk drives~~, and

wherein said switch ~~determines a transfer destination disk drive to which said data sent from external of said storage system is to be sent and transfers said data sent from external of said storage system to said transfer a destination disk drive of said disk drives via by a corresponding one of said paths~~ between said switch and said destination disk drive.

83. (currently amended) The storage system according to claim 82, wherein said storage system has a plurality of said switches, each plurality of switches coupled to said controller ~~via~~ by each of said one or more paths.

84. (currently amended) The storage system according to claim 82, wherein said switch dynamically switches between said ~~plurality of~~ disk drives.

85. (currently amended) The storage system according to claim 82, wherein said controller generates a parity data from said data sent from ~~said another computer external of said storage system~~, and

wherein at least one of said disk drives ~~of said plurality of disk drives~~ stores said parity data.

86. (currently amended) The storage system according to claim 82, wherein said controller generates a parity data from said data sent from ~~said another computer external of said storage system~~, and

wherein some disk drives of said ~~plurality of~~ disk drives stores data without said parity data.

87. (currently amended) The storage system according to claim 82, wherein at least one of said disk drives ~~of said plurality of disk drives~~ are ~~is~~ a spare disk drives, said spare disk drives storing data from another disk drive of said ~~plurality of~~ disk drives.

88. (currently amended) The storage system according to claim 82,  
wherein a first one of said disk drives is capable of communicating with said switch  
independently of path associated with a second one of said disk drives.